Meconium Peritonitis In Neonates: Management Dilemma

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Background: Meconium peritonitis is a rare condition due to perforation of gastrointestinal tract, the management of that condition is controversial.

Objective: To present three cases with meconium peritonitis in neonates.

Design: A retrospective review.

Setting: Surgical Departments, Salmaniya Medical Complex, Kingdom of Bahrain.

Method: Three patients with meconium peritonitis presented to the surgical department between January 2004 to November 2007 were reviewed.

Result: The first baby is 3.5 kg female she was born with respiratory distress. Antenatal ultrasound at 30 weeks of gestation showed polyhydromnios and fetal bowel dilatation suggestive of meconium peritonitis. The second baby is 3.3 kg male who was born and presented with septic shock after birth. The third baby is 2.2 kg male was delivered by cesarean section due to spontaneous preterm rupture of membranes and intrauterine fetal distress. The first two cases underwent emergency peritoneal drainage under local anaesthesia, followed by definitive surgery. The third patient underwent emergency laparotomy and resection of ileal segment and primary anastomosis.

Conclusion: Meconium peritonitis is a rare disorder of intestinal perforation in utero. Management of this condition is difficult and controversial. Initial drainage of meconium and later definitive surgery in critically ill patients, is safe and effective.

Three cases presented to pediatric surgical unit with meconium peritonitis. Two cases were managed successfully by peritoneal drainage followed by definitive surgery and in one case by definitive surgery only.

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Meconium peritonitis is an aseptic chemical peritonitis resulting from in utero perforation of the obstructed gastrointestinal tract and is most commonly secondary to intestinal atresia¹. Most of these cases can be diagnosed by fetal ultrasound^{2,3}. Management of such cases is controversial since the definitive surgery in the early neonatal period is very difficult to perform, due to the poor general condition of the neonate and the presence of

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